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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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09/512,411

02/24/2000

Xiaobao Chen

3-2-2

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DOCKET ADMINISTRATOR  
LUCENT TECHNOLOGIES INC.  
ROOM 2F-192  
600-700 MOUNTAIN AVENUE  
MURRAY HILL, NJ 07974-0636

EXAMINER

NGUYEN, THANH T

ART UNIT

PAPER NUMBER

2144

MAIL DATE

DELIVERY MODE

08/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/512,411

Applicant(s)

CHEN ET AL.

Examiner

Tammy T. Nguyen

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10, 11 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-11, 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6/11/07.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:



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***Detailed Office Action***

1. This action is responsive to the amendment filed on June 8, 2007.
2. Claims 1-8, 10, 11 and 16-21 are pending.

***Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5-8, 10, and 16-18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matti Turunen., (hereinafter Turunen ) U.S. Patent No. 6,477,644 and Larry Suarez., (hereinafter Suarez) U.S. Patent No. 65,790,789 further in view of Immonen et al., (hereinafter Immonen) U.S. Patent No. 7,006,472.
5. As to claim 1, Turunen discloses the invention substantially as claimed, Turunen discloses including a method of establishing a quality of service session between a correspondent node and a mobile node, the mobile node having a home address in a home

network and being temporarily connected at a care-of address in a foreign network, the method comprising the steps of: generating, in the foreign network, a source address of the mobile node's care-of address and a destination address of the correspondent node [see col.2, lines 23-35, and col.6, lines 20-50] (*the host is registered with a foreign agent of that network, the foreign agent then transmits to the mobile host an internet address of the foreign agent..., whenever the mobile host registers with a new foreign network, a new care-of-address is sent to the home network's home agent to replace the previously registered care-of-address*). However, Turunen does not explicitly disclose transmitting the modified message.

6. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).
7. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9]. Also, Turunen and Suarez do not explicitly disclose the session being a quality of service session between the corresponding node and the mobile node.

8. In the same field of endeavor, Immonen discloses (e.g., method and system for supporting the quality of service in wireless networks). Immonen discloses the session being a quality of service session between the corresponding node and the mobile node [see col. 6, lines 45-62] (*the M-Router 52 relays the incoming IP packet flows via the corresponding access point to the mobile terminal using the suitable Qos characteristics*)
9. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Immonenz's teachings of a method and system for supporting the quality of service in wireless networks with the teachings of Turunen, to have the session being a quality of service session between corresponding node and the mobile node, for the purpose of improving the performance of the handover to reduce packet losses [see col.2, lines 40-47].
10. As to claim 2, Turunen teaches the invention as claimed, further comprising the steps of: receiving, in the home network, a request message having a source address of the correspondent node and a destination address of the mobile node's home address; creating a modified request message by replacing the destination address of the request message with the mobile node's care-of address; transmitting the modified request message to the foreign network [see col.2, lines 23-35, and col.6, lines 20-50] (*the host is registered with a foreign agent of that network, the foreign agent then transmits to the mobile host an internet address of the foreign agent..., whenever the mobile host registers with a new foreign network, a new care-of-address is sent to the home network's home agent to*

*replace the previously registered care-of-address*). However, Turunen does not explicitly disclose transmitting the modified message.

11. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*). Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

12. As to claim 5, Turunen teaches the invention as claimed, further comprising the steps of: receiving, in the home network, creating by replacing the source address with the mobile node's home address [see fig.3 of Turunen]. However, Turunen does not explicitly disclose transmitting the modified message.

13. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*). Accordingly, it would have been obvious to one of ordinary skill in the networking art at

the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

14. As to claim 6, Turunen does not explicitly teaches the invention as claimed, wherein the correspondent node generates the request message and receives the further modified reply message. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

15. As to claim 7, Suarez teaches the invention as claimed, wherein: the correspondent node is associated with a correspondent proxy device whereby: the correspondent proxy device

generates the request message; and the correspondent proxy device generates confirmation responsive [see fig.13]. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

16. As to claim 8, Turunen teaches the invention as claimed, wherein the step of generating the message is carried out in the mobile node [see fig.3]. However, Turunen does not explicitly disclose transmitting the modified message.

17. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).



Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

18. As to claim 10, Turunen teaches the invention as claimed, in which the step of generating the message is carried out by a proxy device in the foreign network, the proxy device being associated with the mobile node [see col.6, lines 20-50]. However, Turunen does not explicitly disclose transmitting the modified message.

19. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

20. As to claim 16, Turunen teaches the invention as claimed, including a system configured to supporting session, comprising: a correspondent node, a mobile node having a home address in a home network and being temporarily connected at a care-of address in a foreign network [see col.2, lines 23-35, and col.6, lines 20-50] (*the host is registered with a foreign agent of that network, the foreign agent then transmits to the mobile host an internet address of the foreign agent..., whenever the mobile host registers with a new foreign network, a new care-of-address is sent to the home network's home agent to replace the previously registered care-of-address*) ; a proxy device, in the foreign network, the proxy device associated with the mobile node for generating a modified reply message of an internet protocol packet having a source address of the mobile node's care-of address and a destination address of the correspondent node [see col.6, lines 41-52] (*the GSM network's home agent receives these forwarded datagrams and redirects them to the mobile host*). However, Turunen does not explicitly disclose transmitting the modified message.

21. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*). Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified

message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9]. Also, Turunen and Suarez do not explicitly disclose the session being a quality of service session between the corresponding node and the mobile node.

22. In the same field of endeavor, Immonen discloses (e.g., method and system for supporting the quality of service in wireless networks). Immonen discloses the session being a quality of service session between the corresponding node and the mobile node [see col. 6, lines 45-62] (*the M-Router 52 relays the incoming IP packet flows via the corresponding access point to the mobile terminal using the suitable Qos characteristics*)
23. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Immonenz's teachings of a method and system for supporting the quality of service in wireless networks with the teachings of Turunen, to have the session being a quality of service session between corresponding node and the mobile node, for the purpose of improving the performance of the handover to reduce packet losses [see col.2, lines 40-47].
24. As to claim 17, Turunen teaches the invention as claimed, wherein the proxy device is located in the mobile node [see fig.3, mobile node 9].
25. As to claim 18, Turunen teaches the invention as claimed, wherein the proxy device is located outside the mobile node and coupled to the mobile node [Fig.1]

26. As claim 20, Turunen teaches invention as claimed, the system being a mobile IP environment [see fig.3].
27. As to claim 21, Turunen teaches the invention as claimed, wherein the step of generating the modified reply message comprises: generating a reply message having a source address of the mobile node's home address and a destination address of the correspondent node [see col.6, lines 41-52] (*the GSM network's home agent receives these forwarded datagrams and redirects them to the mobile host*), and replacing the source address with the mobile node's care-of-address [see col.6, lines 21-40]. However, Turunen does not explicitly disclose transmitting the modified message.
28. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).
- Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic, reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9].

29. Claims 3, 4, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matti Turunen., (hereinafter Turunen ) U.S. Patent No. 6,477,644, Larry Suarez., (hereinafter Suarez) U.S. Patent No. 65,790,789 and Immonen et al., (hereinafter Immonen) U.S. Patent No. 7,006,472 further in view of Kidder et al., (hereinafter Kidder) U. S. Patent No. 5,903,735.

30. As to claim 3, Turunen teaches the invention as claimed, wherein the step of generating the modified reply message is carried out by proxy device in the foreign network, the proxy device being associated with the mobile node, and further comprising the steps of: responsive to receipt message at the proxy device, sending an indication signal to the mobile node, whereby the modified reply message is generated responsive to receipt acknowledgment from the mobile node [see fig.1]. However, Turunen does not explicitly disclose transmitting the modified message.

31. In the same field of endeavor, Suarez discloses (e.g., method and architecture for the creation, control and deployment of services within a distributed computer environment). Suarez discloses transmitting the modified message [see col. 26, lines 40-67] (*the destination agent then forwards the modified message to the destination service*).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Suarez's teachings of a method and architecture for the creation, control and deployment of services within a distributed computer environment with the teachings of Turunen, to have transmitting the modified message for the purpose of reducing network traffic,

reducing distribution complexities, and support alternative language systems [see col.6, lines 7-9]. However, Turunen and Suarez does not disclose quality of service session.

32. As claim 4, Turunen does not explicitly teach the quality of service session is an RSVP Message, the request message is a Path message and the modified reply message is a Reservation message.

33. In the same field of endeavor, Kidder discloses (e.g., a method and apparatus for transmitting data having minimal bandwidth requirements) Kidder discloses the quality of service session (See Kidder, col.7, line 55-col.8, line 17);

34. Accordingly, It would have been obvious to one of ordinary skill in the networking art at the time of the invention was made to have incorporated Kidder's teaching of a method and apparatus for transmitting data having minimal bandwidth requirement with the teachings of Turunen to have a quality of service session includes in a communication system because it would have an efficient system that provide to accommodate the prioritization of low bandwidth, minimum latency messages of small packet sizes [see Kidder, col.2, lines 37-40].

35. In the same field of endeavor, Kidder discloses (e.g., a method and apparatus for transmitting data having minimal bandwidth requirements) Kidder discloses the quality of service session is an RSVP session (See Kidder, col.7, line 55-col.8, line 17); the request message is a Path message (see Kidder, col.8, lines 3-17, col.8, lines 49-65, and col.10, lines 22-38); and the modified reply message is a Reservation message (see Kidder, col.8, lines 3-17, and col.9, lines 17-41).

36. Accordingly, It would have been obvious to one of ordinary skill in the networking art at the time of the invention was made to have incorporated Kidder's teaching of a method and apparatus for transmitting data having minimal bandwidth requirement with the teachings of Turunen to have an RSVP, Path and Reservation message session includes in a communication system because it would have an efficient system that provide to accommodate the prioritization of low bandwidth, minimum latency messages of small packet sizes [see Kidder, col.2, lines 37-40].

37. Claims 11, and 19 have similar limitations as claim 4; therefore, they are rejected under the same rationale.

### ***Conclusion***

38. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2143

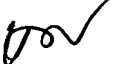
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

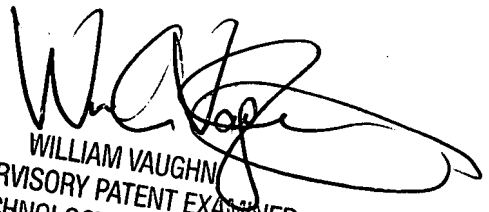
39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929.

The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *William Vaughn* can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
August 12, 2007

  
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